WO 2004/113140 PCT/GB2004/002575

Claims

- 1. A brake system for a railway vehicle, which vehicle comprises a plurality of bogies, each of which bogies has at least one axle, wherein at least some of said axles are provided with axle speed sensors adapted to measure the speed of rotation of the respective axle, the output of the axle speed sensor being fed to a data processor, wherein the data processor is provided with local intelligence so as to permit individual control of brake pressure on each axle or bogie or car, the data processor being adapted to communicate with a brake control unit via a databus, the sensor outputs being processed so that the data can be communicated between the data processor and further data processors, which further data processors are adapted to process sensor outputs on further axles or bogies.
- 2. A brake system according to Claim 1, wherein each axle is provided with at least one axle speed sensor.
- 3. A brake system according to Claim 1 or Claim 2, wherein the databus comprises a network cable or a radio link.
- 4. A brake system according to any one of Claims 1 to 3, wherein at least one bogie per car is provided with a brake control unit adapted to provide wheel spin and/or wheel slide control on axles on that bogie.
- 5. A brake system according to any one of Claims 1 to 4, wherein each bogie per car is provided with a brake control unit adapted to provide wheel spin and/or wheel slide control on axles on that bogie.
- 6. A brake system according to any one of Claims 1 to 5, wherein the system is installed in a railway vehicle comprising multiple vehicles having a databus extending substantially along said multiple vehicles, wherein the brake pressure on one axle per multiple unit vehicle is forcibly released so as to permit determination of the ground speed of the vehicle.

7. A brake system according to Claim 6, in which the brake pressure on two axles is forcibly released to determine the ground speed.

7

PCT/GB2004/002575

WO 2004/113140

8. A brake system according to any one of Claims 1 to 7, in which a further databus is provided in parallel to the first databus to provide redundancy.